




DEPARTMENT OF TRANSPORTATION

Isiah Leggett
County Executive

Al R. Roshdieh
Acting Director

MEMORANDUM

January 9, 2015

TO: Ramona Bell-Person, Assistant Chief Administrative Officer 
Office of the County Executive

FROM: Al R. Roshdieh, Acting Director
Department of Transportation

RE: Bus Rapid Transit Study Letter of Agreement for US 29 and MD 355

This transmittal contains two copies of a Letter of Agreement ("LOA") between Montgomery County ("County") and the Maryland State Highway Administration ("SHA") pertaining to developing, accomplishing, and funding Bus Rapid Transit ("BRT") corridor planning studies for the US 29 and MD 355 corridors. These copies are being submitted to the CAO's office for signature.

The BRT studies shall determine the need, desirability, possible alignments, and options for use in creating a rapid transit system for both US 29 and MD 355 consistent with the approved County Capital Improvement Program (CIP) Project Rapid Transit System No. P501318. The LOA provides for Five Hundred Thousand Dollars (\$500,000) to be provided to the County by SHA in support of the County's efforts in advancing the Rapid Transit System in the County.

MCDOT has been working with SHA over the last several months to develop this LOA and is comfortable with the language currently provided in Exhibit A, which defines the Project Management Scope and tasks to be performed by SHA and the County to accomplish these projects. The County's signature on these agreements will allow us to begin invoicing SHA for staff and consultant expenditures on the Rapid Transit System studies.

Thank you.

Office of the Director

101 Monroe Street, 10th Floor • Rockville, Maryland 20850 • 240-777-7170 • 240-777-7178 FAX
www.montgomerycountymd.gov/dot

Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor



James T. Smith, Jr., Secretary
Melinda B. Peters, Administrator

December 17, 2014

P 01272 C-1

Mr. Arthur Holmes, Jr.
Director
Montgomery County
Department of Public Works and Transportation
101 Monroe Street, 10th Floor
Rockville, MD 20850

RECEIVED

DEC 24 2014

RE: Bus Rapid Transit Study Letter of Agreement
for US 29 and MD 355

DOT
DIRECTOR'S OFFICE

Dear Mr. Holmes:

This Letter of Agreement ("LOA") between the Maryland State Highway Administration ("SHA") and Montgomery County, Maryland ("COUNTY") sets forth the agreement between the parties pertaining to developing, accomplishing, and funding a Bus Rapid Transit corridor study during State Fiscal Year ("SFY") 15, SFY 16, and SFY 17 for US 29 and MD 355 in the COUNTY (the "STUDY").

The STUDY shall determine the need, desirability, possible alignments, and options for use in creating a rapid transit system for both US 29 and MD 355 consistent with the approved COUNTY Capital Improvement Program (CIP) Project Rapid Transit System No. P501318 and in accordance with the Project Management Scope, a draft of which is attached hereto as Exhibit "A".

In consideration of the mutual promises contained herein, SHA and the COUNTY agree to the following:

The COUNTY shall use both consultants and in-house staff in performing tasks related to the STUDY as outlined in Exhibit A. The COUNTY's consultant tasks may include, but are not limited to, data analysis, travel demand forecasting support, community engagement, public outreach support and supporting the COUNTY's efforts in advancing the Rapid Transit System in the COUNTY.

The total maximum amount that SHA will reimburse the COUNTY for COUNTY's costs incurred while performing STUDY tasks is Five Hundred Thousand Dollars (\$500,000) ("SHA Funding" – see Exhibit "B"). The maximum reimbursable amount of the SHA Funding includes the COUNTY's direct salaries, payroll burden and overhead, and its consultant services.

My telephone number/toll-free number is _____
Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free

Street Address: 707 North Calvert Street • Baltimore, Maryland 21202 • Phone 410.545.0300 • www.roads.maryland.gov

Mr. Arthur Holmes, Jr.
December 17, 2014
Page 2 of 4

To receive the SHA Funding, the COUNTY shall invoice SHA quarterly for tasks that have been performed during the prior quarter. Invoicing may commence at the beginning of SFY 15 (i.e., July 1, 2014) up to the SHA Funding amount. On a quarterly basis, the COUNTY will prepare a summary for all COUNTY costs incurred in administering the STUDY, including COUNTY direct salaries, payroll burden and overhead. The COUNTY will provide SHA with evidence that is sufficient in SHA's determination to adequately support costs incurred. The COUNTY's invoices and summaries may also include consultant costs incurred.

Provided SHA agrees with each invoice and there are no disputed items, SHA shall pay each acceptable invoice within thirty (30) days following receipt. However, if SHA does not agree with an invoice the parties will meet to resolve the disputed items.

The period during which the COUNTY may seek reimbursement from the SHA Funding of the COUNTY's STUDY will be for a period of three (3) years, unless earlier terminated or completed, [i.e., from the start of SFY 15 (July 1, 2014) through the end of SFY 17 (June 30, 2017)].

The parties hereto agree to cooperate with each other to accomplish the terms and conditions of this LOA. SHA and the COUNTY agree that completion of the STUDY does not imply that SHA is committing to funding additional phases (i.e., design or construction) that evolve from the STUDY. However, SHA and the COUNTY may execute additional agreements or make amendments to this LOA to fund additional phases of the STUDY.

SHA and the COUNTY agree that this STUDY will be a benefit to both parties of this LOA and will promote the safety, health and general welfare of the citizens of the COUNTY and the State.

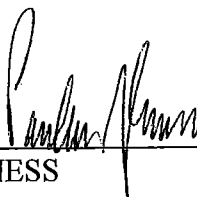
If the terms of this LOA meet with your approval, please sign where indicated and return one signed original of this LOA to Mr. Glenn Klaverweiden, Agreements Coordinator, Regional and Intermodal Planning Division, State Highway Administration, 707 N. Calvert Street, Mailstop C-502, Baltimore MD 21202.

(The remainder of this page is intentionally left blank.)

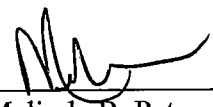
Mr. Arthur Holmes, Jr.
December 17, 2014
Page 3 of 4

IN WITNESS WHEREOF, the parties hereto have caused this LOA to be executed by their proper and duly authorized officers, on the day and year first written above.

**STATE HIGHWAY
ADMINISTRATION**

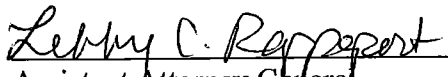


WITNESS

BY:  (SEAL)

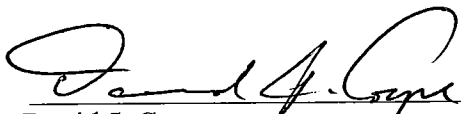
Melinda B. Peters Date
Administrator

**APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:**

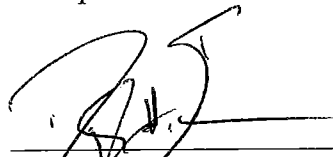


Assistant Attorney General

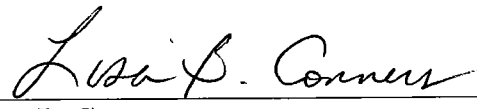
RECOMMENDED FOR APPROVAL:



David J. Coyne
Deputy Administrator/Chief Engineer
for Operations



Douglas H. Simmons
Deputy Administrator/Chief Engineer
for Planning, Engineering, Real Estate
and Environment



Lisa B. Conners
Director
Office of Finance

Mr. Arthur Holmes, Jr.
December 17, 2014
Page 4 of 4

MONTGOMERY COUNTY, MARYLAND
a body corporate and politic



WITNESS L. Austin

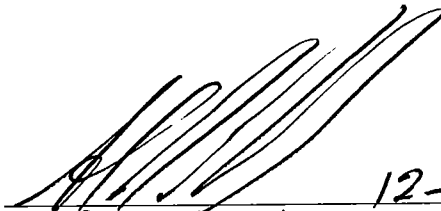
BY: Ramona Bell-Pearns 1/9/15 (Seal)
Date
Assistant Chief Administrative Officer

**APPROVED AS TO FORM AND
LEGALITY
OFFICE OF COUNTY ATTORNEY:**

 1/7/15

County Attorney

RECOMMENDED FOR APPROVAL:

 12-30-14

At R. Roshdich Date
~~Acting~~ Director, Department of Transportation

***US 29 and MD 355
Bus Rapid Transit
Corridor Planning Studies***

Project Management Scope

-----**DRAFT**-----



Bus Rapid Transit Corridor Planning Studies

Project Management Scope and Partnering Agreement

Montgomery County is a vibrant, fast-growing area that is part of a highly congested region. Average commutes are over 35 minutes, and roadway congestion is predicted to increase 70%¹ by 2040. Montgomery County will continue to grow, but mostly through redevelopment, so options for building new roads or expanding existing roads are limited. As a result, the County is striving to increase its transportation connections among communities, including frequent, reliable transit service that can move greater numbers of people to and from jobs, homes, shopping, and entertainment areas.

Montgomery County is studying expansion of its **Rapid Transit System (RTS)**, including **Bus Rapid Transit (BRT)**, which would greatly increase high-quality transit service to the County's most densely developed areas, areas planned for redevelopment, and areas planned for new dense development. BRT offers a cost-effective and versatile way for communities to meet their transit needs. The US 29 and MD 355 Corridors have been identified as potential Bus Rapid Transit (BRT) corridors by the County. As a result, the Maryland State Highway Administration (SHA), in partnership with the Maryland Transit Administration (MTA) and the Montgomery County Department of Transportation (MCDOT), are planning to conduct Corridor Planning Studies for these facilities. The purpose of the Corridor Planning Studies is to include an assessment of various BRT applications, develop recommendations to be used in justifying a project, and to make recommendations for additional evaluation in the NEPA or MEPA process.

BRT Overview

Transit Corridor Studies develop and evaluate system-level and corridor-level concept plans for BRT. BRT service will provide frequent, high-capacity, limited-stop transit service that offers an improved rider experience on busy travel corridors. It uses well-planned bus routes and facilities that provide for high speed travel at a lower cost than other forms of transit. Some of its distinctive features are its high frequency all-day service, off-board fare collection, attractive stations, dedicated roadway, and real-time passenger information. Dedicated roadway is critical to the promise of "rapid" in bus rapid transit – without such a facility, buses would be stuck on the congested roadways. BRT buses have features similar to light rail, including level floors, multiple wide doors for easy boarding and departures, and comfortable interiors that include space for wheelchairs and bicycle storage.

BRT Study Goals

Using the Countywide Transit Corridors Functional Master Plan as a starting point, the US 29 and MD 355 BRT studies will analyze potential BRT service plans and capital improvement alternatives, perform traffic and ridership analyses including person throughput, incorporate transit signal priority (TSP) where feasible, and estimate costs. To accomplish this, a multi-modal approach will be explored to offer the greatest improvements in mobility and alleviate traffic congestion. This system planning process will also include an assessment of the existing

¹ Source: Metropolitan Washington Council of Governments

transportation networks that affect the US 29 and MD 355 corridors. This assessment will include review of existing and future land use patterns, travel demand patterns, and roadway congestion.

Project Limits

- *US 29 Study Limits*
The US 29 Corridor limits are from the Burtonsville Park and Ride to the Silver Spring Metrorail Station area. The BRT would be coordinated to facilitate transfers between the Red Line and Purple Line at the Silver Spring Metrorail Station.
- *MD 355 Study Limits*
The MD 355 Corridor limits are generally from Redgrave Place in Clarksburg to the Bethesda Metro Station area. The BRT would be coordinated to facilitate transfers between the Red Line and Purple Line at the Bethesda Metrorail Station.

BRT Study Scope

The objective of these studies is to assess the need for improved rapid transit service and system connectivity along the US 29 and MD 355 corridor, and to provide and evaluate feasible concepts that can be designed and studied for future implementation. The main focus is to initiate a corridor planning study where findings may be used as part of the overall project development process consistent with National Environmental Policy Act (NEPA) and Federal Transit Administration (FTA) requirements. Public involvement including coordination with Corridor Advisory Committees will be included throughout the study.

Stage I

The purpose of the Stage 1 scope of services is to identify activities required to complete all tasks associated with Alternatives Development (Stage 1 or Pre-Alternatives Analysis [AA]) of the Project Planning process. This study will identify preliminarily costs, benefits and impacts for comparison of a range of transportation alternatives. Results from the study will be presented to agency stakeholders and the public. The Stage 1 or Pre-Alternatives Analysis phase ends with all preliminary data collection, traffic and ridership analysis, and a recommendation of alternatives to evaluate for detailed study.

Stage I includes the following major tasks:

- Hold Project Scoping Meeting (Inter disciplinary Team Meeting)
- Develop detailed project schedule
- Complete preliminary assessment and data collection
- Develop a public involvement strategy
- Conduct community outreach meetings, with an emphasis on reaching minority and low income populations
- Hold periodic meetings with public stakeholders such as residents, community groups and businesses

- Hold Corridor Advisory Committee (CAC) kick-off meeting, followed by CAC meetings every 2-3 months
- Prepare Purpose and Need
- Develop BRT design guidelines
- Develop preliminary BRT alternative concepts
- Complete conceptual engineering and environmental inventory of an alternative
- Prepare cost estimates, including general right-of-way impacts
- Perform travel demand forecasting and operational analyses, including lane repurposing / person throughput
- Hold Alternatives Public Workshop
- Select Alternatives Retained for Detailed Study

Stage II

Stage II includes the detailed alternatives analysis. Once the alternatives are selected for detailed study, engineering concepts are refined, preliminary environmental analyses are completed and a draft report is prepared. A public workshop will be held to present the findings. All comments received from the public workshop will be evaluated and recommendations will be made on the alternatives.

Stage II Tasks include the following activities:

- Develop detailed alternatives and right-of-way impacts including a TSM alternative which could include increasing bus service, changing signal timing, incorporating queue jumps, etc.
- Complete conceptual environmental site design (ESD) to incorporate Storm Water Management regulations by the Maryland Department of the Environment Evaluate environmental impacts
- Hold meetings every 2-3 months with the Corridor Advisory Committees
- Hold periodic meetings with stakeholders
- Perform more detailed travel demand forecasting and ridership analyses, evaluate TSP, as well as perform person throughput and lane repurposing analyses if warranted for specific alternatives
- Prepare cost estimates using templates provided by FTA
- Prepare draft study report
- Hold Workshop on the Alternative Analyses and the draft report
- Evaluate comments received from the public and the agencies and make recommendations for further analysis in stage III

Stage III

During stage III, additional engineering will be performed to minimize impacts. In addition, preliminary mitigation strategies will be identified. A final report will be developed which will include all findings of the study.

Stage III activities include the following:

- Additional Engineering to minimize impacts

- Refined Preliminary ESD locations
- Potential Mitigation Strategies
- meetings every 2-3 months with the Corridor Advisory Committees (could be more frequent)
- Hold periodic meetings with stakeholders
- Finalize Traffic/Ridership analyses
- Finalize CAC Coordination
- Final recommendations and report

National Environmental Policy Act Compliance (NEPA)

The BRT studies will incorporate Planning and Environmental Linkages which will connect the corridor planning study outcomes directly to possible future NEPA studies:

- Coordination with state and federal environmental resource and regulatory agencies.
- Final Study Report which will include environmental findings and analyses.

Service Concepts Under Consideration:

Note: All concepts will incorporate TSP where feasible.

- *Express Bus with Queue Jumps:* Would provide new express bus service. Physical queue jump lanes are designated for use by transit vehicles and only allow transit vehicles to pass a queue of general traffic ("jumping the queue") at a traffic bottleneck.
- *Express Bus with dedicated lanes where feasible:* Would move new express bus service to dedicated lanes, where feasible. The dedicated lanes would be located in the curb lane and would be developed by repurposing existing travel lanes and shoulders or by roadway widening. Buses would continue to operate in mixed traffic where dedicated lanes are not feasible. Buses would use existing bus stops but would stop at fewer locations to decrease travel time.
- *BRT in dedicated lanes and mixed traffic:* Would provide new BRT service in dedicated curb lanes or median lanes created by lane repurposing or roadway widening. This dedicated lane would be created by repurposing existing travel lanes and/or shoulders or by roadway widening. BRT would operate in mixed traffic where dedicated lanes are not feasible. Buses would stop at new BRT stations instead of at existing bus stops.
- *BRT in dedicated reversible lane:* Would provide new BRT service in addition to the existing local bus service. Buses would operate in one dedicated median lane for reversible peak-direction BRT, and mixed traffic for off-peak-direction. This median lane would be created by repurposing existing travel lanes and/or shoulders or by roadway widening. BRT would stop at new BRT stations, while buses in mixed traffic would use existing bus stops.
- *BRT in dedicated bi-directional lane:* Would provide new BRT service in addition to the existing bus service. Buses would operate in both two-way median lanes and bi-directional median lanes, two-lane median section where feasible, and one lane bi-directional median section elsewhere. This median lane(s) would be created by repurposing existing travel lanes and/or shoulders or by roadway widening. BRT would stop at new BRT stations.
- *BRT in dedicated lanes:* Would provide new BRT service in addition to the existing local bus service. BRT would operate exclusively in dedicated lanes located either in the

median (two lanes) or curb lanes (both directions) and created by repurposing existing travel lanes and/or shoulders or by roadway widening. Buses would stop at new BRT stations, which would be similar to rail stations.

SHA/MTA & MCDOT Responsibilities:

The following table outlines the responsibilities for each agency:

SHA/MTA's responsibilities will include:

- Manage day to day activities of the US 29 and MD 355 Corridor Planning Studies.
- Provide consultant resources through available consultant contracts.
- Be the primary contact with federal transportation agencies.
- Present projects to environmental and regulatory agencies in order to garner feedback that can be incorporated into the project plan.
- Serve as the primary lead on completing the BRT Study Task previously mentioned.
- Provide all consultant support needed for the CACs, including meeting facilitation, documentation and communication.

MCDOT's responsibilities will include:

- Participate in regular project team meetings and project partnering meetings.
- Help coordinate the BRT Citizen Advisory Groups.
- Serve as a resource in coordinating local transit operations issues.
- Provide guidance in helping SHA/MTA understand BRT system priorities and potential phasing.
- Participate in all major study decisions including public meeting materials, alternative assessments, pre traffic analysis scoping, and review of design alternatives.
- Review project technical reports and documents.

Project Team Organization

The Project Team will be led by the SHA's Project Management Division's Multi-Modal Team Leader. The SHA Team Leader will assign the US 29 and MD 355 projects to consultant project managers who will coordinate project team activities with internal and external stakeholders. The SHA Team Leader and his/her staff will work with both MTA and MCDOT project management team members to coordinate day to day project activities. A BRT Team Organization Chart has been included to show how team members will communicate.

Project Partnering

Regular Partnering Meetings

We anticipate that project leadership and technical meetings will be held on a monthly basis in order to keep the project moving forward. These monthly meetings will also provide MCDOT a project status update for each of the four corridor planning studies. The monthly coordination

meetings will be conducted in-person. Agendas will be prepared and distributed in advance of all meetings to allow attendees time to prepare and to ensure that the invited attendees are the appropriate ones for the topics being addressed. Follow up items and or action item lists, if applicable, will be a part of the Agendas.

In addition, the SHA Project Manager will coordinate with the MCDOT Project Manager(s) on a weekly or bi-weekly basis as needed to discuss project meetings and tasks. These coordination discussions may happen in-person, by phone, or by e-mail.

Issue Resolution Process

The team will make every effort to resolve issues within the team structure in a timely manner. In the event that we are unable to resolve any issues during the course of this project, the team agrees to use that attached Issue Resolution Chart. This chart shows how SHA/MTA and MCDOT representatives can elevate and resolve project issues.

Project Schedule:

It is anticipated that these studies will take approximately two (2) years to complete. The SHA/MTA and MCDOT team members will review the project schedule on a quarterly basis to assess the progress of the project. Any changes such as additional analyses, project scope changes, responses to Corridor Advisory Committee follow ups will be documented.. A proposed project workflow is attached to this MOU.

Attachments:

- Team Organization Chart
- Issue Resolution Chart
- Proposed Project Workflow



Maryland Department of Transportation
The Secretary's Office

Exhibit B

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

James T. Smith, Jr.
Secretary

April 8, 2014

Mr. Arthur Holmes, Jr.
Director
Montgomery County Department of Transportation
101 Monroe Street, 10th Floor
Rockville MD 20850

Dear Director Holmes:

I am writing to follow up on recent conversations and correspondence on efforts to advance the Montgomery County Rapid Transit System (RTS) in the MD 355 and US 29 through detailed corridor planning. Be assured that Maryland Department of Transportation (MDOT) recognizes the importance of this effort to the County and intends to work together in close partnership with you to advance the effort.

From the Department's side, I asked the State Highway Administration (SHA) to serve as the Department's lead and Maryland Transit Administration (MTA) to provide additional technical support as necessary to work with you to immediately define a planning effort that initially focuses on the project scope and limits. I understand this effort will require MDOT to provide some financial assistance to the County Department of Transportation (MCDOT). We are prepared to make up to \$500,000 available to reimburse your transportation agency in expenses toward this effort. We are currently developing a Memorandum of Understanding to outline roles, responsibilities, and payment schedules moving forward. Department staff will reach out to MCDOT to discuss roles, responsibilities, and other specifics related to this effort shortly.

I look forward to continuing to work together with you to enable progress on the RTS. If you have any questions or would like additional information, please feel free to contact Mr. Sean Egan, Director, MDOT Washington Area Transit Office. Mr. Egan can be reached at 301-577-2063 or via email at segan@mdot.state.md.us. Mr. Egan will be happy to assist you. Of course, you may also contact me directly.

Sincerely,

James T. Smith, Jr.
Secretary

cc: Mr. Leif Dormsjo, Deputy Secretary, Planning and Project Management, MDOT
Mr. Sean Egan, Director, Washington Area Transit Office, MDOT
Mr. Greg Slater, Director, Office of Planning and Preliminary Engineering, SHA

My telephone number is 410-865-1000
Toll Free Number 1-888-713-1414 TTY Users Call Via MD Relay
7201 Corporate Center Drive, Hanover, Maryland 21076